

## Abstract

An optical detection liquid handling robot, including: a frame; a X-Y-Z robot connected to the frame; a plurality of liquid aspiration and dispensing nozzles connected to the X-Y-Z robot; a positioning system configured to position the X-Y-Z robot relative to the frame, thereby positioning the plurality of liquid aspiration and dispensing nozzles relative to the frame; a flow cell in each of the liquid aspiration and dispensing nozzles; a fiber optic probe in communication with each of the flow cells; and a spectrophotometer, wherein each of the fiber optic probes are multiplexed to the spectrophotometer.